



CLAIMS

CLAIMS 1-20 (cancelled)

21. (new) A signal making and/or receiving device comprising at least one member elected from the group consisting of (a) to (ii) and mixtures thereof:

- 10 (a) where at least one member elected from the group consisting of emitters, receptors, features, pixels, bumps, tubes, balls, lenses, the elements and mixtures thereof have a plurality of non uniform dimensions in at least one member elected from the group consisting of width, height, shape, and distance between them and mixtures thereof on and/or in its surface,
- 15 (b) where at least one member elected from the group consisting of emitters, receptors, features, pixels, bumps, tubes, balls, lenses, the elements and mixtures thereof can be arrayed in at least one member elected from the group consisting a periodic, irregular, non uniform pattern, and mixtures thereof.
- 20 (c) where predetermined ratios of dimensions and shapes of at least one member elected from the group consisting of emitters, receptors, features, pixels, bumps, tubes, balls, lenses, the elements and mixtures thereof compared to at least one other element can be adjusted and varied while maintaining a non uniform array with a plurality of elements,
- 25 (d) where at least one member elected from the group consisting of emitters, receptors, circuits, features, bumps, tubes, dots, balls, lenses, the elements and mixtures thereof can move in a predetermined way described by at least one member elected from the group consisting of move in and out of a surface, side to side, and change shape and location, and mixtures thereof compared to each other and the surface,
- 30 (e) where the rear surface includes at least one member elected from the group consisting of curved, hyperbolic, parabolic, cycloidal, non uniform, periodic shapes and mixtures thereof in different areas, and in at least one position substantially behind similar shapes on the outer surface,
- 35 (f) where the rear surface contains at least one member elected from the group consisting of emitters, receptors, circuits, data storage units, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof separated from each other by a plurality of non uniform distances, on the outer surface and anywhere in between,
- 40 (g) where at least one member elected from the group consisting of emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fibers, lenses, the elements and mixtures thereof can be of at least one member elected from the group consisting of varying sizes, shapes, orientations and mixtures thereof a plurality of which are non uniform,
- 45 (h) where emitting and/or receiving a signal the signal bending or reflecting means can vary in focal depth in a predetermined way in a non uniform, irregular, periodic pattern in a plurality of positions,

- (i) where a plurality of the signal emitting and/or receiving elements are spread unevenly on the inner and outer surface in a plurality of positions,
- (j) where the elements defined herein can contain other elements defined herein on or in them, and so on as deeply as desired, in at least one member elected from the group consisting of periodic, aperiodic, or non uniform patterns, and mixtures thereof.
- 5 (k) where any emitter can be replaced by a receptor or vice versa,
- (l) where at least one member elected from the group consisting of the parts, emitters, receptors, data storage units, circuits, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can be pushed from behind to change shape, or pulled from behind and/or another direction to change shape,
- 10 (m) where a plurality of at least one member elected from the group consisting of the parts, emitters, receptors, data storage units, circuits, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can contain at least one member elected from the group consisting of phosphor, ends of optic fibers, be polarized,
- 15 (n) where the receptors and/or emitters are directed in irregular orientations statically and/or dynamically,
- (o) where at least one of the signal emitters and/or receptors is recessed in a tube,
- 20 (p) where at least one member elected from the group consisting of the parts, emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can be curved or straight in a predetermined ratio,
- 25 (q) where at least one member elected from the group consisting of the parts, emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can cross partially or wholly,
- (r) where at least one member elected from the group consisting of the parts, emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can be of the same or varying sizes in sections of at least one member elected from the group consisting of a periodic, aperiodic, irregular, non uniform pattern,
- 30 (s) where at least one member elected from the group consisting of the parts, emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can be circular in cross section or any shape, and alter cross section according to a stimulus,
- (t) where at least one member elected from the group consisting of the parts, emitters, receptors, data storage, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can be long and narrow, short and wide,
- 35 (u) where at least one member elected from the group consisting of elements, emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can move around, change position, and point in different directions on a surface independently or in a predetermined pattern with other elements,
- (v) where at least one member elected from the group consisting of parts, emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can change orientation according to a stimulus,

5 (w) where at least one member elected from the group consisting of parts, emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can flex while inside or outside into at least one member elected from the group consisting of any shape, changing length, width, depth, becoming straighter or more curved, and mixtures thereof.

10 (x) where the at least one member elected from the group consisting of emitters, receptors, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can scan in a predetermined pattern to receive and /or transmit a signal,

15 (y) where at least one member elected from the group consisting of emitters, receptors, bumps, dots, pixels, tubes, optic fibers, lenses and mixtures thereof can be mounted in or on flat or curved shapes,

20 (z) where a beam can play across at least one member elected from the group consisting of emitters, receptors, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof like an electron gun, inputting a signal, stimuli,

25 (aa) where at least one member elected from the group consisting of emitters, receptors, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof are empty, hollow,

30 (bb) where at least one member elected from the group consisting of emitters, receptors, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof are composed of a transparent, and/or polarizing material,

35 (cc) where at least one member elected from the group consisting of emitters, receptors, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can be printed, molded, inserted onto and/or into a surface,

40 (dd) where a lens can bend light from at least one member elected from the group consisting of emitters, receptors, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof and/or bend light into it,

45 (ee) where at least one member elected from the group consisting of emitters, receptors, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof being stationary and at least one is moving around in a predetermined pattern,

(ff) where at least one member elected from the group consisting of emitters, receptors, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can focus a beam of at least one member elected from the group consisting of light, sound, radiation, electrons, positrons, magnetic fields, and mixtures thereof onto the surface of at least one member elected from the group consisting of emitters, receptors, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof.

(gg) where a surface with varying substantially non uniform patterns can be used to focus at least one member elected from the group consisting of light, sound, electromagnetic radiation, positrons, electrons, magnetic fields, and mixtures thereof.

(hh) where textures can be simulated with at least one member elected from the group consisting of emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fiber, lenses, and mixtures thereof.

(ii) where at least one member elected from the group consisting of the bumps, dots, pixels, tubes, optic fiber, lenses, and mixtures thereof can contain an emitter and receptor with a divider between them, and mixtures thereof.

22. (new) A device as claimed in Claim 21 comprising at least one member elected from the group consisting of (a) to (k) and mixtures thereof:

- 5 (a) that can have at least one member elected from the group consisting of light, sound, magnetic fields, electrons, positrons, pressure, signals, and mixtures thereof, come through from behind or reflected from the front,
- 10 (b) where a screen can contain emitters and/or receptors of at least one member elected from the group consisting of sound, light, electromagnetic radiation, pressure, and mixtures thereof, in separate areas and/or a plurality are intermixed in any ratio,
- 15 (c) where a plurality of at least one member elected from the group consisting of parts, emitters, receptors, data storage units, circuits, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof, can each be or have an overlay of a polarizing material in a predetermined polarizing direction, in a way described by at least one member elected from the group consisting of a periodic, aperiodic, irregular pattern, and mixtures thereof,
- 20 (d) where receptors and emitters in a uniform, periodic or non uniform pattern can emit and receive at least one member elected from the group consisting of sonar, vibrations, pressure, data on earth tremors, vibrations, data on fish movements, data on boat movements, data on storms, data on hurricanes, and mixtures thereof.
- 25 (e) where at least one member elected from the group consisting of non uniform arrays of parts, emitters, receptors, data storage units, bumps, dots, circuits, pixels, tubes, optic fibers, lenses, and mixtures thereof can emit or receive at least one member elected from the group consisting of polarized light, laser light, sound, pressure, all electromagnetic frequencies, and mixtures thereof.
- 30 (f) where a phosphor material glows to direct light up at least one of at least one member elected from the group consisting of the parts, emitters, receptors, data storage, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof arrayed in a non uniform or periodic pattern in a plurality of positions,
- 35 (g) where at least one member elected from the group consisting of radar, sound, heat, electrons, positrons, magnetic fields, electromagnetic radiation and mixtures thereof can be focused with a reflecting and/or refracting means, and/or a parabolic mirror onto a curved focal plane, and where the same array can be an emitter,
- 40 (h) where other frequencies of light than red, green, and blue can be emitted and/or received,
- (i) where at least one member elected from the group consisting of the non uniform arrays of parts, emitters, receptors, data storage units, circuits, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof can be combined with at least one member elected from the group consisting of colored dots, textures, matt finish, shiny surfaces, color, grayscale materials, and mixtures thereof,
- 45 (j) where at least one member elected from the group consisting of radar, light, sound, heat, pressure, magnetic fields, electrons, positrons, and mixtures thereof can be emitted from a curved plane onto a reflecting and/or refracting, focusing means and be directed to a predetermined task,

5 (k) where at least one member elected from the group consisting of radar, light, sound, heat, pressure, magnetic fields, electrons, positrons, and mixtures thereof can be emitted from a curved plane through at least one lens and be focused onto a surface,

10 23. (new) A device as claimed in Claim 22 comprising at least one member elected from the group consisting of (a) to (o) and mixtures thereof:

15 (a) where at least one member elected from the group consisting of emitters, receptors, features, pixels, bumps, tubes, balls, circuits, optic fibers, lenses and mixtures thereof can direct the emissions on or near the edges of a display and/or receiver to make a predetermined non uniform or periodic pattern, synchronize with neighboring displays and/or receivers, their edges,

20 (b) where on or near the edges of the display and/or receptors, and/or on a plurality of selected sections, at least one member elected from the group consisting of emitters, receptors, features, circuits, pixels, bumps, tubes, balls, optic fibers, lenses, and mixtures thereof, can make tiling displays and/or receptors connect in a predetermined non uniform or periodic pattern,

25 (c) where supports and braces in at least one member elected from the group consisting of cathode ray tubes, displays, receptors, LCD screens, can have at least one member elected from the group consisting of parts, emitters, receptors, data storage units, bumps, circuits, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof in and/or through them,

30 (d) where near or on the edges between tiled displays, emitters and/or receptors are less visible by using a non uniform or periodic pattern of elements in a plurality of positions in the display and/or receptor,

35 (e) where a non uniform or periodic pattern can also be used for visual effects in tiling displays, emitters, and/or receptors,

40 (f) where a plurality of at least one member elected from the group consisting of non uniform emitters, receptors, circuits, features, pixels, bumps, tubes, balls, lenses are used on or in a display, a helmet, an eyeglass display, a screen, walls of a room, a holodeck, on or in the ground, in the air, in any ratio, and mixtures thereof.

45 (g) where at least one member elected from the group consisting of the emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fiber, lenses, and mixtures thereof can be parts of and connected to computer circuitry,

(h) where at least one member elected from the group consisting of the emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fiber, lenses, and mixtures thereof can make electronic ears and eyes,

(i) where at least one member elected from the group consisting of the emitters, receptors, bumps, dots, pixels, tubes, circuits, optic fibers, lenses, and mixtures thereof can store data by alterations in their shape, orientation, ratios, densities, and in changes to their structure,

(j) where at least one member elected from the group consisting of the parts, emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fiber, lenses, and mixtures thereof can contain wires, optical waveguides in a plurality of non uniform ways,

5 (k) where at least one member elected from the group consisting of walls, chairs, cloth and mixtures thereof can be covered substantially and interwoven with at least one member elected from the group consisting of emitters, receptors, data storage units, circuits, bumps, dots, pixels, tubes, optic fiber, lenses and mixtures thereof that are non uniform and/or periodic in a plurality of places,

10 (l) where cloth can be made of at least one member elected from the group consisting of emitters, receptors, circuits, data storage units, bumps, dots, pixels, tubes, optic fiber, lenses, circuitry, and mixtures thereof.

15 (m) where connections between parts of at least one member elected from the group consisting of the emitters, receptors, data storage, bumps, dots, pixels, tubes, optic fibers, lenses are by wires, optic fiber, tubes, signals by light, sound, electrons, positrons, magnetic fields, and mixtures thereof and are regulated by circuitry,

20 (n) where a periodic pattern of lenticular lenses or barriers to emit a 3D image is excluded as a periodic pattern herein,

(o) where fixed, non flexing glass columns extending from the surface in a uniform pattern to emit a 3D image are excluded,

24. (new) A 2D/3D system comprising at least one member elected from the group consisting of (a) to (y) and mixtures thereof:

25 (a) where at least one member elected from the group consisting of receiving and/or emitting elements, circuits, lenses, mirrors, polarized elements, textured elements and mixtures thereof can be at least one member elected from the group consisting of glued, attached, connected, and mixtures thereof onto and/or into at least one member elected from the group consisting of a display surface, fabric, printed page, and mixtures thereof, inserted onto and/or into at least one member elected from the group consisting of at least one printed page, cloth, moldable surface, and mixtures thereof to create and/or receive a 2D/3D image,

30 (b) where the deformable materials used comprise at least one member elected from the group consisting of concrete, paper, plastic, and mixtures thereof that can be molded,

35 (c) where at least one member elected from the group consisting of dots, emitters, receptors, circuits, bumps, dots, pixels, tubes, optic fiber, circuitry and mixtures thereof can be molded with at least one member elected from the group consisting of plastic, metal, concrete, paper and mixtures thereof into place and printed dots added,

40 (d) where at least one member elected from the group consisting of emitters, receptors, data storage, bumps, circuits, dots, pixels, tubes, optic fiber, lenses, and mixtures thereof on and in the surface can be at least one member elected from the group consisting of rotated, reoriented, relocated and mixtures thereof to preferred positions to create and/or receive a 2D/3D image,

45 (e) where at least one member elected from the group consisting of the emitters, receptors, data storage, circuits, bumps, dots, pixels, tubes, optic fiber, lenses, and mixtures thereof can be etched and polarized in a plurality of non uniform positions and specifications, with any other objects defined in these

claims in a periodic or uniform set of positions and specifications to create and/or receive a 2D/3D image,

5 (f) that can be disassembled into sections, each section to be used as a 2D/3D display with a plurality of non uniform specifications in its elements, and where a plurality of 2D/3D displays and/or receptors can be assembled together to make a larger screen with a plurality of non uniform characteristics,

10 (g) where the objects as defined anywhere in these claims can contain or adjoin other such objects and other such elements in or on them, and so on as deeply as desired, and also they can overlap in a 2D/3D emitter and/or receptor,

15 (h) where the 2D/3D display and/or receptor has at least one member elected from the group consisting of circuits, rotating elements, rotating tubes, rotating pixels, rotating bumps, rotating lenses, rotating mirrors, rotating fibers, and rotating means and mixtures thereof in at least one member elected from the group consisting of any trajectory, direction, shape, curve, and mixtures thereof,

20 (i) where at least one member elected from the group consisting of liquid crystal displays and Cathode Ray Tube displays and mixtures thereof, can be used to supply images to the 2D/3D display and/or receptor,

(j) where at least one member elected from the group consisting of film, CCD's and mixtures thereof, can be used as receptors,

25 (k) where at least one member elected from the group consisting of emitters, receptors, data storage, circuits, bumps, dots, pixels, tubes, optic fibers, lenses and mixtures thereof, can be at least one member elected from the group consisting of solid, hollow, flexible, contain wires, solids, liquids, and mixtures thereof,

(l) where the surface can be at least one member elected from the group consisting of an irregular, periodic wave like pattern or shape, and mixtures thereof,

30 (m) where the data received in association with the 2D/3D device can be stored in a 3D pattern in a storage device,

(n) where pressure can be applied from below and/or above to change the shape of at least one member elected from the group consisting of the screen surface, icons, circuits, lenses, bumps, pixels, tubes, fibers, and mixtures thereof,

35 (o) where the non uniform pattern of a plurality of at least one member elected from the group consisting of emitters, receptors, data storage, bumps, circuits, dots, pixels, tubes, optic fibers, lenses and mixtures thereof, in their orientation can give a particular image, use, effect,

(p) where etched parts of the surface in a plurality of non uniform positions can assist in the storing of data, receiving and/or emitting signals, and mixtures thereof,

40 (q) where at least one tube on and in the front and/or rear surface or other surface can alter at least one member elected from the group consisting of the orientation, shape, position, cross section and mixtures thereof, while emitting and/or receiving at least one member elected from the group consisting of images, data, sounds, radiation, recording data, images, and mixtures thereof,

45 (r) where a plurality of non uniform elements in a 3D pattern can act as a barrier to view from some directions,

5 (s) where a plurality of the light bending and reflecting elements in a 2D/3D display and/or receptor can have at least one member elected from the group consisting of a non uniform, periodic or aperiodic pattern, and mixtures thereof,

(t) where a plurality of the lenses, focusing means have at least one member elected from the group consisting of a different focal length, width, size, shape, and a differing focal plane shape, and mixtures thereof,

10 (u) where a plurality of the rear and other surface areas have at least one member elected from the group consisting of an irregular, non uniform, aperiodic, periodic, curved, cycloidal, parabolic, hyperbolic, slanted surface, and mixtures thereof,

(v) where the emitters and/or receptors have a plurality of at least one member elected from the group consisting of irregular locations, sizes, distances, shapes between them, and mixtures thereof,

15 (w) where the walls of a cinema can be covered with 3D screens, arranged on each wall,

(x) where the emitters and/or receptors can be in the shape of a part or whole of a cylinder on the inner and/or outer surface,

(y) where a focusing means comprising at least one lens can focus onto at least one member elected from the group consisting of at least one part, emitter, receptor, data storage, bump, dot, pixel, tube, optic fiber, lens, and mixtures thereof, in a non uniform array and record and/or display a stereoscopic picture,

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25 25. (new) A device as claimed in claim 24 comprising at least one member elected from the group consisting of (a) to (h) and mixtures thereof:

30 (a) where it emits and/or receives, records and/or plays back at least one member elected from the group consisting of light, sound, electrons, radar, sonar, low frequency waves, pressure, electrons, positrons, magnetic fields, and mixtures thereof,

(b) which can emit a first sound signal to attenuate a second sound signal by emitting that first sound signal in a 3D array to substantially mimic the waves of the second sound signal, but out of phase to reduce its volume,

35 (c) that can emit and receive 3D sounds of all frequencies in a directed manner in a 3D way, electromagnetic and/or sound,

(d) where the elements are arrayed to emit and/or receive a 2D/3D signal,

(e) where at least one member elected from the group consisting of emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fibers, lenses and mixtures thereof, can emit and/or receive changes in variables including at least one member elected from the group consisting of heat, decay, time dilations, color changes, pressure, and mixtures thereof,

40 (f) where the 2D/3D display and/or receptor has rotating colored balls, which can show different patterns in different directions.

(g) where at least one member elected from the group consisting of light, positrons, electrons, magnetic fields and mixtures thereof can be emitted and/or received, and the data to and from at least one member elected from the group consisting of the emitters, receptors, data storage, bumps, dots, pixels, tubes, optic fibers, lenses and mixtures thereof can be emitted and/or received,

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(h) where a projector can emit a first signal onto the screen to cause a plurality of elements in a non uniform or periodic array to emit a second signal,

5 26. (new) A device as claimed in Claim 25 comprising at least one member elected from the group consisting of (a) to (h) and mixtures thereof:

10 (a) where the display and/or receptor can be a wall hanging, any kind of display shape known in the art,

15 (b) where a display and/or receptor can be at least one member elected from the group consisting of circular, spherical, cylindrical, periodic, irregular and mixtures thereof in at least one section,

20 (c) where an object of a first shape with a 3D array of emitters and/or receptors on it transfers a signal to and/or from an object of a second shape with a 3D array of emitters and/or receptors on it,

25 (d) where a laser can be reorientated and remodulated in response to a stimuli, radio waves, to emit a signal onto the inside of an object, sphere, with a plurality of receptors on or in its inner surface and those signals can be transferred to at least one member elected from the group consisting of a display, storage, conduit, tube, and mixtures thereof,

30 (e) where the signal can be data, imagery,

25 (f) where the signal can be analogue or digital and vary in at least one member elected from the group consisting of brightness, loudness, contrast, color, and mixtures thereof,

35 (g) where the waves can be coherent, incoherent, digital,

40 (h) where the elements can form a tactile display in a plurality of non uniform areas in at least one member elected from the group consisting of the distances, size, shape, width, depth between the emitters, receptors, data storage, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof,

30 27. (new) A device as claimed in Claim 26 comprising at least one member elected from the group consisting of (a) to (m) and mixtures thereof:

35 (a) that can be placed in any shape around an object, in conjunction with cameras, receptors to determine the scenery, objects around it, to display a 3D image and make the object appear at least one member elected from the group consisting of substantially or wholly invisible, transparent, cloaked, and mixtures thereof,

40 (b) that uses a combination of 3D emitters and/or receptors using any 3D process known to the art to make an object appear transparent, invisible,

45 (b) to make the object covered substantially by a combination of 3D emitters and/or receptors appear to be at least one different object and other parts to appear at least one member elected from the group consisting of substantially transparent, invisible, cloaked, and mixtures thereof.

(c) where sound, radar can be at least one member elected from the group consisting of attenuated, cancelled out, reconstituted and mixtures thereof, to make the object appear substantially transparent, opaque to these, and/or to substantially replace these signals with a different signal,

- (d) where a combination of 3D emitters and/or receptors can make an object appear to be at least one member elected from the group consisting of substantially transparent, invisible, cloaked to electromagnetic radiation, visible light, infra red radiation, radar, sonar, and mixtures thereof, and/or to present a 3D image of at least one object in electromagnetic radiation, visible light, sound, infra red, radar, sonar, pressure, and mixtures thereof,
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- (e) where a substantially or wholly transparently appearing combination of 3D emitters and/or receptors also displays a less transparent or opaque image, to create the partial appearance of at least one member elected from the group consisting of transparency, invisibility, cloaking, mimicry, and mixtures thereof,
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- (f) where a first 3D image can be partially transparent to overlay the first image on a second 3D image, such images can be of at least one member elected from the group consisting of scenery, data, computer graphics, and mixtures thereof, to create the appearance of at least one member elected from the group consisting of transparency, invisibility, cloaking, mimicry, and mixtures thereof,
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- (g) where at least one member elected from the group consisting of individual polarized, etched, and other emitters, receptors, data storage units, bumps, dots, pixels, tubes, optic fibers, lenses, and mixtures thereof, are at least one member elected from the group consisting of affixed, inserted, attached, molded and mixtures thereof, to make a 3D image to create the appearance of at least one member elected from the group consisting of transparency, invisibility, cloaking, mimicry, and mixtures thereof,
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- (h) where connections between parts of at least one member elected from the group consisting of the emitters, receptors, data storage, bumps, dots, pixels, tubes, optic fibers, lenses and mixtures thereof, are by at least one member elected from the group consisting of wires, optic fiber, tubes, and mixtures thereof, and are regulated by circuitry to create the appearance of transparency, invisibility, cloaking, mimicry, and mixtures thereof,
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- (i) where the elements can move in and out and around, change shape to create the appearance of at least one member elected from the group consisting of transparency, invisibility, cloaking, mimicry, and mixtures thereof,
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- (j) where the emitters and receptors can be mixed together in any ratio, in a periodic, aperiodic, uniform pattern and mixtures thereof, to create the appearance of at least one member elected from the group consisting of transparency, invisibility, cloaking, mimicry, and mixtures thereof,
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- (k) where multiple image screens can have image data transferred to a single combination of 3D emitters and/or receptors,
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- (l) where the 3D elements can contain other elements and other elements in them, and so on as deeply as desired. to create the appearance of at least one member elected from the group consisting of transparency, invisibility, cloaking, mimicry, and mixtures thereof,
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- (m) which can be wrapped around or formed on at least one member elected from the group consisting of objects of any shape, a sphere, cylinder, a partial cylinder inside or outside, a chair, walls of a room, and mixtures thereof,

28. (new) A device comprising at least one member elected from the group consisting of (a) to (f) and mixtures thereof:

- 5 (a) A 3D surface used as a storage medium in at least one member elected from the group consisting of hard drives, optical discs, storage devices, and mixtures thereof,
- (b) where the uneven, irregular, shape of the surface can be created, written and viewed as data,
- 10 (c) where the shape varies in 3 dimensions instead of 2 like in CD's and DVD's,
- (d) where the surface can be altered by a CD burner to create and/or alter the surface in a non uniform 3D pattern,
- (e) where the surface can be of a hard drive or optical disc material, of materials used in a 3D display,
- 15 (f) where the surface can alter in at least one member elected from the group consisting of shape, reflectivity, magnetization, charge, in response to stimuli, pressure, and mixtures thereof,

29. (new) A device as claimed in Claim 28 comprising at least one member elected from the group consisting of (a) to (i) and mixtures thereof:

- 25 (a) where elements on or in the surface of the storage medium, at least one member elected from the group consisting of record, reflect, emit magnetic fields, electrons, positrons, light, sound, electromagnetic radiation, data, and mixtures thereof,
- (b) where the device can have at least one member elected from the group consisting of sensors, receptors imbedded and/or emitters, and mixtures thereof,
- (c) where the surface can be recorded on and/or read from by multiple sensors,
- (d) where a plurality of at least one member elected from the group consisting of tubes, wires, and mixtures thereof, can connect to a plurality of emitters and/or receptors, record and/or playback heads, lasers, that read and/or write to the 3D storage surface,
- 30 (e) where the 3D storage surface can spin, move forwards and backwards, move a first direction then a second direction,
- (f) where the surface can be made into any 3D shape,
- (g) where the surface can be altered in topography to create any kind of reflective and refractive pattern in 3D by a stimulus,
- (h) where at least one member elected from the group consisting of the transparency, refractive and reflective properties of the surface and mixtures thereof, can be altered by a CD burner, a stimulus to make a non uniform 3D pattern, to remove, alter, erase data,
- 40 (i) where the 3D surface can be magnetized at a plurality of points to record and playback data,

45 30. (new) A device as claimed in claim 29 comprising at least one member elected from the group consisting of (a) to (x) and mixtures thereof:

(a) where tubes connect to nodes, where nodes contain at least one member elected from the group consisting of circuits, 3D wiring, recording and/or playback, and mixtures thereof,

5 (b) where nodes can move about, in and out of an object, alter shape,

(c) where nodes can be viewed, accessed by a plurality of at least one member elected from the group consisting of sensors, viewpoints, receptors, and mixtures thereof,

10 (d) where nodes can emit and/or receive at least one member elected from the group consisting of sound, light, heat, electromagnetic radiation, pressure, and mixtures thereof, to and from preferred directions,

(e) where at least one node has at least one member elected from the group consisting of tubes, wires, optic fibers connected, and mixtures thereof,

15 (f) where nodes can at least one member elected from the group consisting of block, close off, alter, let preferred signals, materials, gases, liquids, and mixtures thereof, pass through them to other nodes, to a circuit, receptor, emitter,

(g) where activation of a node at least one member elected from the group consisting of blocks, alters or allows and mixtures thereof, a signal to go through it,

20 (h) where viewers cause nodes to open some facets and close other ones,

(i) where viewers can be mechanical devices or human,

(j) where the nodes can contain and/or be part of Boolean logic circuits,

(k) where operations in and between nodes can be erased,

(l) where all group theory patterns can be created in switching,

25 (m) where the array can be reconfigured in real time,

(n) where some dimensions, views are common to a plurality of viewers and some are unique to a viewer,

(o) where the viewer is replaced, augmented by a mechanical device at times,

(p) where data is stored in a multidimensional lattice,

30 (q) where nodes can alter their configuration to create specialized circuits, improve their connection, optimize circuits,

(r) where data on connections between nodes is stored in a 3D lattice,

(s) where all kinds of circuits known in the art can be used herein,

(t) where tasks can be broken up into sub tasks to be done by specialized arrays of nodes,

35 (u) where nodes can be molded of at least one member elected from the group consisting of plastic, concrete, paper, metal, and mixtures thereof, and at least one additional element added,

(v) where nodes can contain 3D imaging and/or playback devices, 3D wiring,

40 (w) where viewers can operate in pairs and higher numbers coordinated together,

(x) where nodes have a plurality of facets,

31. (new) A device as claimed in Claim 30 comprising at least one member elected from the group consisting of (a) to (t) and mixtures thereof:

45 (a) where tubes are used in circuitry to conduct optical and/ or electric signals between nodes,

- (b) where tubes are used to channel light to and from a display surface,
- (c) where tubes are used to channel data to and from a storage surface,
- (d) where tubes can intersect each other partially or wholly to transmit a signal,
- 5 (e) where the tubes can contain polarizing material,
- (f) where the tubes can contain transparent material or be hollow,
- (g) where the tubes can contain wires,
- (h) where the tubes can connect to circuitry,
- (i) where the tubes can flex and move, in and out of a surface in response to a
- 10 stimuli,
- (j) where the tubes can be woven together like a cloth, rope,
- (k) where the hollow or filled tubes can be used as wires in any kind of circuitry,
- (l) where the tubes can be any size, shape, cross section, and mixtures thereof,
- 15 (m) where the hollow tubes can join other hollow tubes,
- (n) where a lattice, array of tubes acts as RAM,
- (o) where hollow or filled tubes can be used in long term memory, random access memory, 3D memory,
- (p) where the tubes can contain at least one member elected from the group consisting of gases, vacuum, liquids, solids, circuitry, and mixtures thereof,
- 20 (q) where the tubes are regulated in circuits by a computer clock,
- (r) where tubes can receive and/or emit a signal of at least one member elected from the group consisting of sound, pressure, light, lasers, electromagnetic radiation, electrons, positrons, sonar, radar, and mixtures thereof,
- 25 (s) where a first viewer can input data at a first point in the lattice and a second viewer can view it at a second point,
- (t) where the lattice of tubes, wires, connectors can be a uniform, periodic or non uniform array,
- 30 32. (new) A device as claimed in claim 31 comprising at least one member elected from the group consisting of (a) to (g) and mixtures thereof:
 - (a) where a signal emitter and/or receiver including at least one member elected from the group consisting of at least one light beam, laser beam, sound waves, beam of electrons, beam of positrons, a magnetic field, beam of electromagnetic radiation and mixtures thereof, can be at least one member elected from the group consisting of directed, deflected, reflected, focused and mixtures thereof, across the ends of at least one member elected from the group consisting of tubes, optic fibers, lenses and mixtures thereof, in a predetermined pattern sequentially to transfer data to and/or from a display and/or receptor,
 - 35 (b) where at least one member elected from the group consisting of a plurality of emitters, receptors, lasers, electron guns, lights, sounds, electrons, positrons, magnetic fields and mixtures thereof, can be directed onto and/or into the ends of tubes, optic fibers, lenses and mixtures thereof, in a predetermined pattern to transfer signals to and/or from an image emitter and/or receiver,
 - 40 (c) where a signal emitter and/or receptor can at least one member elected from the group consisting of rotate, alter orientation, vibrate, oscillate, and
- 45

mixtures thereof, according to a stimulus to direct a signal on the tube, optic fiber ends in a predetermined pattern to transfer a signal to and/or from a display and/or receptor,

5 (d) where a deflecting means can at least one member elected from the group consisting of oscillate, vibrate, alter orientation according to a stimulus and mixtures thereof, to move and/or receive at least one at least one member elected from the group consisting of light beams, laser beams, sound waves, beam of electrons, beam of positrons, at least one magnetic field, beams of electromagnetic radiation and mixtures thereof, in a predetermined pattern across and/or into and/or out of at least one member elected from the group consisting of at least one tube, optic fiber, emitter, receptor, lens, mirrors and mixtures thereof, to transfer a signal to and/or from a display and/or receptor.

10 (e) where the signal can be modulated by a system in which at least three polarized plates are set, the two outer at substantially 90 degrees polarity to each other, and at least one plate rotates relative to the other plate or plates to modulate a signal of electromagnetic radiation, light passing through it, and the central plate polarization can be removed to alter the signal, and where liquid crystals can be used as well as or instead of the plates,

15 (f) Where at least one member elected from the group consisting of reflectors and/or refractors, mirrors and/or lenses and mixtures thereof, are at least one member elected from the group consisting of vibrated, moved, altered in shape, changed in orientation and mixtures thereof, to move at least one member elected from the group consisting of at least one laser beam, light beam, sound waves, magnetic field, and mixtures thereof, over a screen in a predetermined pattern to form an image,

20 (g) where the laser, light, sound, magnetic field can make the display surface glow, emit a second signal, stimulate a response from at least one element on or in the screen,

25 33. (new) A Device as Claimed in Claim 32 comprising at least one member elected from the group consisting of (a) to (e) and mixtures thereof:

30 (a) where data is arranged in higher than 3, 4 dimensions and can be displayed in groups of 2, 3, 4 dimensions,

35 (b) where a first plurality of dimensions are worked with and then a second plurality of dimensions are observed, worked with,

30 (c) where at least one member elected from the group consisting of games, programs, operating systems, file managers, databases, spreadsheets, can be made of environments in higher than 4 dimensions and where one can sequentially look at and interact with a subset of those dimensions, and which can also use the 2D and 3D surfaces described herein to be viewed on,

40 (d) where the logic circuits can act in higher dimensions,

45 (e) where points on or in the surface of the display and/or receptor are calculated to find the angle the signal must exit or enter the surface element, and where no single element is in the desired position, orientation, the signal may be averaged according to an algorithm over a plurality of elements.